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ABSTRACT

This unit of instruction is one of a series of materials developed by the Comprehensive Vocational Teacher Education Program for the Mississippi ARC (Appalachian Regional Commission) Region to provide teacher educators, vocational directors, teachers, and others with basic instructional materials needed to guide and assist inservice vocational teachers in improving professional teaching competencies. This unit on evaluating student performance and recording student achievement in vocational education contains lesson plans, instructional material, teaching aids, transparency masters, evaluation instruments, and references needed to conduct a minimum of 3 hours of inservice training on the subject. The two lesson plans contained in the unit include student learning objectives, materials and equipment needed, introduction, learning activities with suggested dialogue, application (drill, illustration, questions, participation in discussion, and so forth), evaluation, and summary. Directions for using this instructional inservice unit are included in the package. (KC)

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ED220644

EVALUATING AND RECORDING STUDENT ACHIEVEMENT IN VOCATIONAL EDUCATION

DEVELOPED BY

EVERETTE SANDIFER, JR.

MAY, 1981

Comprehensive Vocational Teacher Education Program
for the Mississippi ARC Region

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Inservice Instructional Unit VA

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FOREWORD

This unit of instruction is one of a series developed by the Comprehensive Vocational Teacher Education Program for the Mississippi ARC Region to provide teacher educators, vocational directors, teachers, and other appropriate individuals with some basic instructional material needed to guide and assist inservice vocational teachers in improving professional teaching competencies. The competencies addressed are those which have been identified and validated as being important to successful vocational teachers. Individual unit titles were selected on the basis of a comprehensive needs assessment inventory completed by over 200 inservice vocational teachers of the Mississippi ARC Region.

Each unit contains the lesson plans, instructional material, teaching aids, transparency masters, evaluation instruments, and references needed to conduct a minimum of three hours of inservice training on the subject. The material contained in each unit was thoroughly researched and field tested before inservice vocational teachers, teacher educators, and vocational directors before being published and is considered appropriate for teachers in all occupational areas and at both the secondary and postsecondary levels of instruction.

Special recognition for major roles in the direction, development, coordination, and testing of these instructional units is extended to: Mr. Elwyn Wheat, Director of Vocational and Technical Education, Mississippi State Department of Education, who conceived the idea of the Comprehensive Vocational Teacher Education Program; the twelve member Program Steering Committee which so ably assisted in identifying inservice teacher needs and

priorities; the graduate interns and assistants of the Department of Industrial and Occupational Education, Mississippi State University who researched, developed and field tested the units; the vocational directors and teachers of the Mississippi ARC Region who participated in the field testing; and Gerald A. Richardson, the Associate Project Director, who coordinated and supervised the development of these instructional units. Sincere appreciation is also extended to the Appalachian Regional Commission for the funding and sponsorship of this project.

Harry D. Holloway
Project Director

HOW TO USE THIS INSTRUCTIONAL UNIT

1. This instructional unit is designed to provide sufficient material for a three hour inservice training session. The comprehensiveness of each lesson will depend upon the class time available and the total preparation of the teacher.
2. Teachers should carefully study each lesson plan, teaching aids, instruction sheet and transparencies before attempting to use them. Since each lesson is planned around material found in the references, it is suggested that the references be studied if possible.
3. The lesson plans are intended as guides for assisting the teacher. However, they are flexible enough to allow the teachers to inject their own personality and techniques into the lesson.
4. It is suggested that the teacher follow five stages in teaching: preparation, presentation, application, verification, and summary. The presentation and application stages can often be combined and the summary may be used at any point in the lesson.
5. Coding of teaching aids, instruction sheets, transparencies and evaluation instruments.
   a. Units of instruction are designated by Roman Numberals and capital letters (IA, IB, IIA, IIB, etc.)
   b. Lesson plans are designated by capital letters (A, B, C, etc.)
   c. Teaching aids are designated by (A) and an arabic numberal and coded to the lesson with which it will be used.

      Example: The first teaching aid for the second lesson in unit IIIA would be coded IIIA-B-(A1).

d. Instruction sheets are designated by (I) and an arabic numberal and coded to the lesson with which it will be used.

   Example: The second instruction sheet for the first lesson in unit IIA would be IIA-A-(I2).

e. Transparencies are designated by (T) and an arabic numeral and coded to the lesson with which it will be used.

   Example: The third transparency to the second lesson of unit IIA would be coded IIIA-B-(T3).

f. Evaluation instruments are designated by an (E) and coded to the lesson with which it will be used.

   Example: An examination to be given in the third lesson of unit IA would be IA-C-(E).

PREFACE

Two of the more difficult tasks of teaching seem to be evaluating student performance and keeping an accurate and efficient record of each student's achievements. As it has been said many times, "It comes with the territory." As vocational/technical instructors, we must accept these responsibilities and become as efficient as possible in evaluating and recording procedures.

As vocational/technical instructors, we must evaluate each student by measurement (quantitative description of student performance - testing, etc.) and by monitoring (a daily evaluation of student progress, attitudes, values, and achievements).

The evaluation process must be based on predetermined goals and objectives and administered through the procedures of planning; testing; monitoring student participation, attitudes, values and progress; and the application of a fair grading system. We must also be concerned with designing an efficient and workable recording system.

It is hoped that this instructional unit will aid vocational/technical instructors in accomplishing the difficult tasks of evaluating student performance and recording student achievement.

Everette Sandifer, Jr.

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COMPREHENSIVE VOCATIONAL TEACHER EDUCATION PROGRAM
FOR
THE MISSISSIPPI ARC REGION

UNIT TITLE: Evaluating and Recording Student Achievement in Vocational Education

PREPARED BY: Everette Sandifer, Jr. DATE: April, 1981

I. INTRODUCTION:

To evaluate students completely and effectively, the instructor must base his/her final evaluation on all three learning domains: psychomotor (skills), cognitive (knowledge), and affective (attitude). This can be done by constructing valid and reliable measuring devices in each domain and by establishing and applying procedures to accurately monitor the achievements of each student in all domains.

II. UNIT OUTLINE

A. Evaluating Student Achievement

1. Measurement considerations
2. Evaluating in the psychomotor domain
   a. performance objectives
   b. evaluating process and product
   c. developing performance tests
   d. developing and using measuring devices
   e. laboratory activities
   f. student participation in evaluation
   g. feedback
3. Evaluating in the cognitive domain
   a. performance objectives
   b. characteristics of tests
   c. planning tests
   d. types and construction of tests
   e. administering and scoring tests
   f. feedback
4. Evaluating in the affective domain
   a. beliefs on measuring in this domain
   b. behavioral objectives
   c. actual tests and interviews
   d. evaluating student pride and values
   e. evaluating student dependability and participation
   f. rating scales
5. Assigning student grades

B. Recording Student Achievement

1. Grade books
2. Individual achievement sheets

3. Notecard catalog or file
4. Progress charts
5. Certificates
6. Others

III. STUDENT PERFORMANCE OBJECTIVES

The student will be able to:

A. Identify the different learning domains vital for evaluation of student achievement

B. List and explain considerations necessary in the evaluation process.

C. Develop a valid and reliable performance test.

D. Identify and construct valid and reliable types of cognitive tests.

E. Identify means of evaluating in the affective domain.

F. Identify and discuss ways of recording student achievement.

IV. STUDENT LEARNING ACTIVITIES	RESOURCES REQUIRED
Participate in discussion on measurement considerations	Overhead transparencies: VA-A-(T1-T5) Instructional sheet: VA-A-(I1)
Listen to teacher presentation on evaluating in the psychomotor domain	Overhead transparencies: VA-A-(T6-T10) Instructional sheets: VA-A-(I2-I5)
Listen to teacher presentation on evaluating in the cognitive domain and participate in developing tests in his/her instructional area	Overhead transparency: VA-A-(T11) Instructional sheets: VA-A-(I6-I14)
Participate in discussion on measuring or evaluating in the affective domain	Overhead transparency: VA-A-(T12) Instructional sheets: VA-A-(I15-I17)
Take post-test on evaluating student achievement	Evaluation: VA-A-(E1)

V. STUDENT EVALUATION:

Students will be evaluated by:

A. Oral questions given in class and evaluated by the teacher.

B. Individual tests developed by students using criteria from unit, rated by themselves. (rating scale: 1-excellent, 2-good, 3-fair, 4-needs improvement).

C. A post test based on information and material presented on evaluating student achievement.

VI. RESOURCE MATERIAL:

Erickson, Richard C., and Wentling, Tim L., Measuring Student Growth, Allyn and Bacon, Boston, Mass., 1976.

Silvus, Harold G., and Bohn, Ralph C., Planning and Organizing Instruction, McKnight Publishing Co., Bloomington, Ill., 1976.

The National Center for Research in Vocational Education, The Ohio State University, Columbus, Ohio.

Module B-2, "Developing Student Performance Objectives"

Module D-1, "Establishing Performance Criteria"

Module D-2, "Assess Student Performance: Knowledge"

Module D-3, "Assess Student Performance: Attitude"

Module D-4, "Assess Student Performance: Skills"

Module D-5, "Determine Student Grades"

Module D-6, "Evaluate Your Instructional Effectiveness"

Wentling, Tim L., Evaluating Occupational Education and Training Programs, Allyn and Bacon, Boston, Mass., 1980.

Vocational Instructional Services, Designing Objective, Essay and Performance Tests, Texas A & M University, College Station, Texas, 1975.

INSTRUCTOR'S PLAN

INFORMATION LESSON

Unit VA
Lesson VA-A

UNIT TITLE: Evaluating and Recording Student Achievement in Vocational Education

LESSON SUBJECT: Evaluating Student Achievement

OBJECTIVES: The student will be able to:

A. Identify and discuss considerations applicable to measurement.

B. Identify and explain the three learning domains.

C. Distinguish when to evaluate process or product and compare these two in his/her service area.

D. Discuss ways of evaluating populations in each domain.

E. Develop checklists or rating scales for measurment of learning in affective domain.

F. Develop good tests using samples from this unit.

G. Discuss possible grading systems.

TEACHING AIDS:

A. Teaching Aid:

VA-A-(A1) Evaluating Student Achievements

B. Transparencies:

VA-A-(T1)	Societal Consideration
VA-A-(T2)	Vocational Consideration
VA-A-(T3)	Institutional Consideration
VA-A-(T4)	Student Consideration
VA-A-(T5)	Instructional Consideration
VA-A-(T6)	Psychomotor Domain
VA-A-(T7)	Performance Objectives
VA-A-(T8)	Process vs Product
VA-A-(T9)	Process and Product Considerations
VA-A-(T10)	Feedback
VA-A-(T11)	Cognitive Domain
VA-A-(T12)	Affective Domain

C. Instructional Sheets:

VA-A-(I1) Concepts and Considerations in Measurement Procedures

VA-A-(I2)	Rating Scale for Measuring Performance
VA-A-(I3)	Checklist for Measuring Performance
VA-A-(I4)	Student and Instructor Evaluation
VA-A-(I5)	Task Sheet for Measuring Performance
VA-A-(I6)	Factors in Test Design
VA-A-(I7)	Regular True and False Test
VA-A-(I8)	Modified True and False Test
VA-A-(I9)	Matching Test
VA-A-(I10)	Multiple Choice Test
VA-A-(I11)	Identification Test
VA-A-(I12)	Completion Test
VA-A-(I13)	Essay Test
VA-A-(I14)	Problem Solving Test
VA-A-(I15)	Rating Scale for Measuring Affective Domain
VA-A-(I16)	Checklist Scale for Measuring Affective Domain
VA-A-(I17)	Grades

MATERIALS/EQUIPMENT Overhead projector and screen

REFERENCES:

Erickson, Richard C., and Wentling, Tim L., Measuring Student Growth, Allyn and Bacon, Boston, Mass., 1976.

Silvus, Harold G., and Bohn, Ralph C., Planning and Organizing Instruction, McKnight Publishing Co., Bloomington, Ill., 1976.

The National Center for Research in Vocational Education, The Ohio State University, Columbus, Ohio.

Module B-1, "Develop Student Performance Objectives"

Module D-1, "Establishing Performance Criteria"

Module D-2, "Assess Student Performance: Knowledge"

Module D-3, "Assess Student Performance: Attitudes"

Module D-4, "Assess Student Performance: Skills"

Module D-5, "Determining Student Grades"

Vocational Instructional Services, Designing Objective, Essay and Performance Tests, Texas A & M University, Texas, 1975.

I. INTRODUCTION (Preparation of the Learner)

A vital function of the vocational or technical instructor is evaluating student achievement. It is necessary that instructors know and understand correct areas, methods and considerations of measurement and evaluation. The purpose of this lesson is to acquaint the vocational or technical teacher with evaluation procedures in each domain of learning.

II. LEARNING ACTIVITIES (Presentation of Information)

Instructional Topics Teaching Points	Things For Students To Do Things For Instructors To Do And Say
A. Measurement Considerations Transparencies: VA-A-(T1) VA-A-(T2) VA-A-(T3) VA-A-(T4) VA-A-(T5)	1. Factors to consider in setting criteria for measurement a. Societal b. Vocational c. Institutional d. Student e. Instructional
Instruction sheet: VA-A-(I1)	2. Concepts in measurement procedures
Class discussion	3. Discuss considerations in each service area represented
B. Evaluating the Psychomotor Domain Transparencies: VA-A-(T6) VA-A-(T7) VA-A-(T8) VA-A-(T9)	1. Based on performance objectives which: a. Are predetermined b. Contain certain criteria 2. Product or process a. Cite examples when process, product, and both are considered
Class discussion	b. Discuss each service area represented
Instructional sheets: VA-A-(I2-I4) VA-A-(I5)	c. Evaluation instruments d. Performance tests and task sheets
Transparency: VA-A-(T10)	e. Monitoring students f. Feedback - definition and proper use of

C. Evaluating the Cognitive Domain Transparency: VA-A-(T11) Instructional sheets: VA-A-(I6) VA-A-(I7) VA-A-(I8) VA-A-(I9) VA-A-(I10) VA-A-(I11) VA-A-(I12) VA-A-(I13) VA-A-(I14)	1. Testing a. Considerations and factors b. True-False tests c. Matching tests d. Mutliple choice tests e. Identification tests f. Completion tests g. Essay tests h. Problem solving tests i. Administering and scoring j. Feedback
D. Evaluating the Affective Domain Transparency: VA-A-(T12) Class discussion	1. Discuss beliefs on this domain 2. Explain areas and factors we can measure
Instruction sheets: VA-A-(I15-I16)	3. Discuss instruments for use
E. Assigning Student Grades Instructional sheet: VA-A-(I17)	1. Discuss grading systems a. Basis for grades b. Types of grades

III. APPLICATION (Drill, illustration, questions, participation in discussion, assignments, investigations, note-taking, etc.)

Steps II and III are combined.

A. Class discussion at the end of section A.

B. Class discussion after section B-1-A. Ask students from each service area represented to discuss when product should be evaluated vs when process should be evaluated.

C. Class discussion at the beginning of section C

D. Class discussion at the end of section C

E. Students will be allowed to examine and comment on handouts.

IV. EVALUATION (Verification of students' comprehension of material presented)

A. The students' participation in class activities and discussion will be evaluated by the instructor.

B. A post-test will be given at the end of the instructional unit.

V. SUMMARY (Re-emphasize the important points. This summary may be given at any place in the lesson the teacher feels will be profitable to the student.)

Point 1 - The vocational or technical instructor should understand the 3 learning domains, the reasons for evaluating in all 3 domains and proper techniques in evaluating student achievement.

Point 2 - Product vs process is a very important consideration in performance tests.

Point 3 - What considerations and factors are essential in test design.

Point 4 - What types of grading systems are available and which would be most appropriate for a particular service area.

TEACHING AID

SUBJECT: Evaluating Student Achievements

MEASUREMENT CONSIDERATIONS

To evaluate student achievement fairly and impartially, the instructor must measure student growth in all three learning domains. Such measurements must be based on predetermined standards which are derived from the following factors:

1. SOCIETAL - Community values such as respect for others, respect for property, honesty, safety, productive citizenship, etc.

2. VOCATIONAL - The knowledge and skills required of a student for entry into and success in an occupation. Licensing may even be required.

3. INSTITUTIONAL - Standards expected at each learning center such as: graduation requirements, performance levels, class attendance, etc. These standards will vary from center to center.

4. STUDENT: Needs, interest, aptitudes, career goals, entering competencies (abilities), etc.

5. INSTRUCTIONAL - Program, course, lesson aims, goals and objectives.

Measurement procedures used to evaluate student achievement in any domain must also be based on the following concepts:

1. VALIDITY - The degree to which a measurement is useful. Does it measure what it is supposed to measure?

2. RELIABILITY - The degree of consistency or stability. Is the evaluation instrument consistent in its measurement?

3. OBJECTIVITY - Permits one and only one interpretation. Can the instrument be scored consistently and fairly without resorting to personal opinion?

4. DISCRIMINATION - Does the instrument identify those who have mastered the material and those who have not?

5. COMPREHENSIVENESS - Does the instrument reflect all of the subject content to be assessed?

6. EASE OF ADMINISTRATION - Can the test be easily administered and scored?

7. OTHER FACTORS - When will we measure? What type of scale will be used for making comparison (nominal, ordinal, or ratio)? What points of reference will be used (norm or criterion - referenced)?

EVALUATING IN THE PSYCHOMOTOR DOMAIN

Industry demands that students entering an occupation have certain occupational skills. Therefore, vocational-technical instructors must evaluate student achievement in the psychomotor domain of learning. Evaluation in this domain must be based on well-written performance objectives (what the student must be able to do) which have been identified as a result of an occupational (career) analysis.

A well-written performance objective should state precisely what the student will be able to do once a course or lesson is completed. A well-written performance objective should always contain three elements: 1) Performance - what the student will do, 2) Conditions - the circumstances under which it will be done, and 3) Criterion - the performance standards which the student must meet. The performance required of a student must be observable and measurable. A well-written performance objective not only identifies expected outcomes for the instructor and the student and lets the student know what is expected, but it also lets parents, administrators, prospective employers, and others know exactly what is being taught.

When evaluating student achievement in the psychomotor domain, a performance test is the most appropriate type of evaluation instrument to use. There are two basic types of performance tests:

1. PROCESS: A process test is used to determine whether or not a student knows and can correctly perform all of the procedures (steps) involved in completing a procedure or task. Instances where a process test is more appropriate are when: tool or equipment usage is important, health and safety hazards are involved, time is a critical factor or internal operations cannot be evaluated without destroying a final product. For example, a process test would be most appropriate for evaluating an automobile

mechanics student's performance in replacing a brake shoe, a practical nursing student's performance in administering an injection, or an electrical trades student's performance in connecting power lines.

The test instrument which should be used in administering a process evaluation is a checklist. Any checklist should be constructed so as to be valid and reliable and each activity or behavior essential to the process should be included. A checklist may be a simple yes-no (pass-fail) type or a more complex competency level type.

2. PRODUCT: A product test should be administered in situations where the end product is more important than the process used to produce it, any one of several equally effective processes could be used to produce a product, or the process is too difficult to observe and evaluate. For example, a product test would be an effective way to evaluate a cabinet built by a woodworking student or a floor plan drawn by a drafting student.

   The test instrument which is most often used to evaluate a product is a rating scale. A rating scale is different from a checklist in that it not only tells whether or not something has been done, but how well it was done. It discriminates between the degrees of mastery achieved by one student as compared to another, and in doing so, provides a sounder basis for assigning letter or numerical grades.

Often it will be necessary to administer both process and product tests for student performance to be fairly evaluated. Also, performance tests may be used as either pre-tests or post-tests. Regardless of what type or when a performance test is used, each test must be carefully designed and administered to the student in the most practical and realistic setting possible.

One of the best ways to establish realistic and practical settings for the administration of performance tests is through the use of task, assignment, and job sheets. Such instructional sheets, if properly designed, not only set the situation, but list performance objectives (what the student will do, the conditions under which it will be done, and the criterion to be met) and tasks to be completed. A performance test may also be designed to permit both the instructor and the student to evaluate performance.

Unlike many other types of tests, performance tests are usually administered to one student at a time. However, as with other tests they should be administered in an area where there is no excessive noise and distractions. Also, the results of performance tests should be talked over with students and any mistakes corrected immediately.

In addition to administering performance tests, the instructor must also monitor the student on a day-to-day basis if psychomotor achievement is to be fairly evaluated. Observing students, in the laboratory and on daily assignments is a must. Some students tend to "freeze" or "tighten up" on tests but do excellent work in the lab. Very seldom will a person in industry have someone constantly looking over his or her shoulder or be subjected to the excessive pressure placed on students at test time. In the relaxed atmosphere of the shop important observations of students can be made.

EVALUATING IN THE COGNITIVE DOMAIN

There is a consensus among teachers that it is easier to evaluate student achievement in the cognitive domain than in either the psychomotor or affective domain. This is probably because we usually associate written tests with evaluation in the cognitive domain and believe that written tests are easier to develop than psychomotor performance tests. However, for a written test to be an adequate instrument for measuring student knowledge, recall abilities, and ability to work under testing pressure, it must be as carefully planned as the psychomotor performance test or any other learning activity. A good written test must be valid, reliable, objective, discriminating, comprehensive, and easy to administer and score. Also, a written test, just as a psychomotor performance test, must be developed around student performance objectives which establish the level of knowledge to be evaluated

The most common types of tests used to evaluate student learning in the cognitive domain are: true-false, multiple choice, identification, completion, essay, and problem-solving. The advantages and disadvantages of each type of test and some hints on developing each type are listed below.

TRUE-FALSE - True-false tests have the advantages of being efficient for covering large quantities of material in a short period of time and being easy to construct. A major disadvantage is the susceptibility to guessing. Some factors to consider in designing true-false tests are:

1. Include only one central idea for each word or question.

2. Word each question so that it can be only true or false.

3. Keep it short and in simple terms.

4. Limit the number of negative statements.

5. Avoid using clues to the answer.

MATCHING TESTS - Matching tests also have the advantage of efficiency in that a large quantity of material can be covered in a short period of time. A major disadvantage is that too often there is an insufficient amount of material to construct a good test instrument. Some major factors to consider when constructing a matching test are:

1. Include only material on the same subject.

2. Keep the list of items fairly short (about fifteen) and place the responses on the right.

3. Use a larger number of responses.

4. Be sure to specify if the answers can be used more than once.

MULTIPLE CHOICE - This is one of the more popular types of tests. Major advantages include its capability to assess many levels of achievement, it is usually less likely to be misinterpreted, it is less open to guessing, and finally, it is easy to score. It has the disadvantage of taking quite a bit of room and time in constructing. Factors for consideration include:

1. Use only relevant questions and responses.

2. Keep the statement short, simple, and concise.

3. Use positive wording.

4. Try to use five responses if possible. If not possible, keep the number uniform throughout the test.

5. Watch the placement of the correct response so that a pattern cannot be established.

COMPLETION TESTS - These are basic tests in which a statement is incomplete. It is one of the best tests for recalling knowledge and it greatly minimizes guessing. Factors to remember in constructing completion or short answer tests are:

1. Omit only significant words and require the responses to be short and concise.
2. Avoid direct statements from texts.
3. Try to place blanks at the end of sentences and make sentences the same length.
4. Give no clues to the correct answer.
5. Try to have only on blank per sentence.

IDENTIFICATION TESTS - Identification tests are usually associated with identifying objects, either pictorial or the object itself. It is usually visual but could be used through the hearing, smelling, or touching senses. The factors will be similar to those for short answer completion tests.

ESSAY TESTS - Essay tests are probably the hardest tests to score because opinions or judgments must be used. If this type of test is used, scoring keys for each item must be developed to allow for student responses. This is an important type of test because students must recall, organize, and present ideas. It gives students a chance to express themselves also. It is easy to construct but cannot sample a broad knowledge level. Be sure to make directions and conditions quite clear.

PROBLEM-SOLVING TESTS - The problem-solving test is the best test to use for evaluating a student's ability to bring related material together and organize it in a workable situation. Problems or situations should be realistic. Students should comprehend related materials before asked to problem-solve.

When administering a test, one should make sure students are able to concentrate. The room should be quiet, a comfortable temperature, and have adequate lighting. The instructor should explain the test before allowing students to start.

The scoring of written tests should be fair, impartial, and based on scoring keys. Each section of a test should be scored on all tests before moving on to another section. It is advisable for the instructor to avoid looking at the name of the paper, thus remaining impartial.

From the scores and test results, valuable feedback information can be obtained. Student progress; levels of performance, interests, and abilities; student understanding; aid in career guidance; aid in program evaluation; aid in teacher effectiveness; and aid in curriculum improvement information can be obtained from test results and scores.

EVALUATING IN THE AFFECTIVE DOMAIN

Affective domain is the most difficult and controversial to evaluate. Many people believe this area should be left alone, but it is one of the more important for vocational-technical instructors to consider. A student is not ready for the world of work unless his or her attitude, interest, pride, etc. is "acceptable". This acceptable level is up to the vocational-technical instructor to evaluate. It will vary from area to area.

Many educators believe you cannot teach attitudes and values, but we certainly can present well-planned material in this area and definitely try to instill the benefits of good attitudes, pride of craftsmanship, and appreciation for quality work.

As in the other two domains, the basis for evaluating student progress in the affective domain centers around objectives (referred to as behavioral objectives). Each vocational area will be different, yet we should try to include these considerations in its objectives:

1. Appreciate that particular vocational area (interest).
2. Value the necessity of being on time.
3. Value orderliness.
4. Keep a positive and friendly attitude. (Get along with others.)
5. Participate.
6. Take pride in craftsmanship.
7. Respect rights of others.

Written or oral tests may be designed for measuring student performance in the affective domain. The feedback from such tests can aid in assessing a student's entry level of behavior as well as later levels. Also, it aids in curriculum development, guidance, identification of student interests, and can be used to facilitate learning.

The methods most commonly used to evaluate student performance in the affective domain are interviews (both structured and non-structured), questionnaires, inventories, essay type tests, and observations of students. Observation is probably the most commonly used method. Monitoring students on a day-to-day basis and at times when they are unaware is one of the best methods. One of the disadvantages of the observation method is that too often a record is not made at the time the observation is made but is recalled later when a recommendation is needed. Sometimes such recollections become very subjective because the teacher may remember one bad observation at the expense of many good ones or vice versa.

Interviews can also be very effective in assessing attitudes or values. However, it should be remembered that some students may say things that they don't believe, especially if they know they are being evaluated.

Checklists and rating scales are effective instruments for use when observing, monitoring, or interviewing students. Checklists usually indicate that a student does or does not exhibit certain traits, characteristics, attitudes, values, interests, etc. Rating scales should show a range (from low to high) or level of traits, attitudes, interests, values, etc.

ASSIGNING STUDENT GRADES

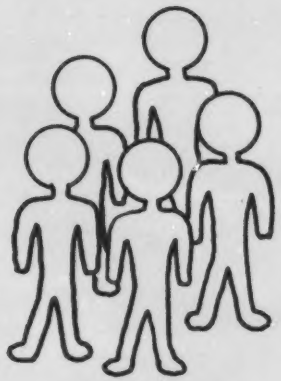
The assignment of grades is an extremely important part of the learning process and of the vocational-technical instructor's job. Grades are expected by student, parents, and administrators. Grades serve as a basis for graduation, retention, placement, decisions by students, guidance decisions, motivation, and other functions.

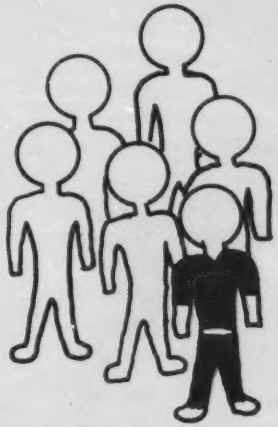
Grading systems are usually established by the school administration and are expected to be followed. The traditional type of grades are: letter grades - A,B,C,D, and F, and number grades of 1-100. For reports, the letter grades are usually required.

Many times instructors develop their own type of daily grading systems. Often times such systems involve a simple check minus or check plus. Some types of learning, such as safety, demand that a pass-fail system be used.

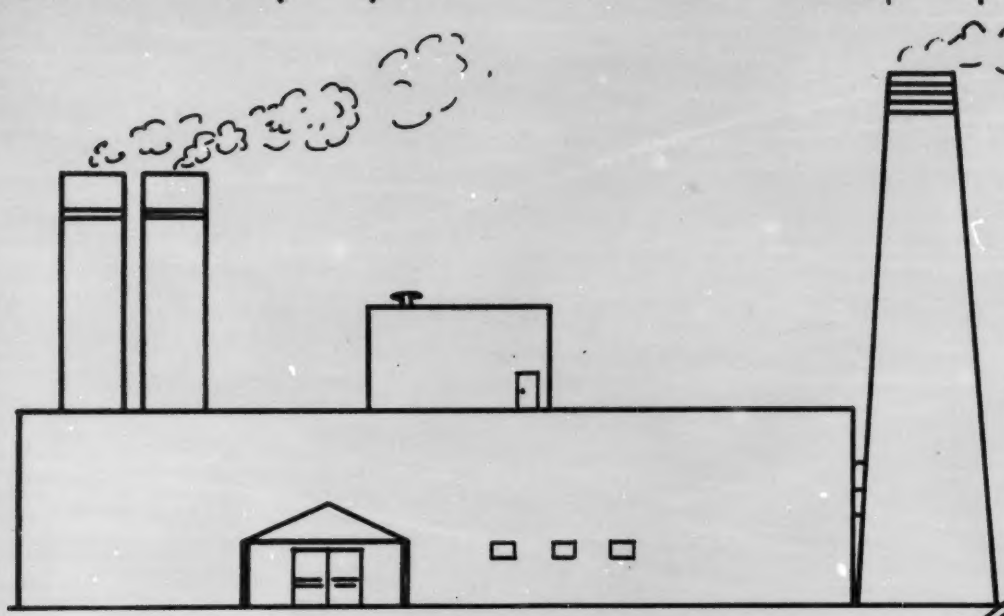
Written evaluations or skill reports are very valuable and many times required in some institutions. They let the instructor comment on student achievement, explain it, and even list competencies or areas of special achievement.

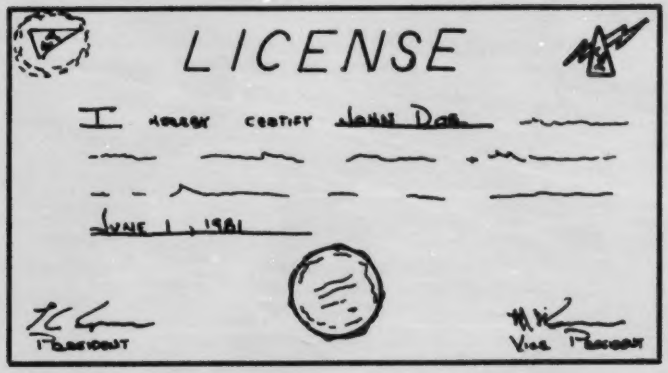
You should develop a system that works for your program, and which is fair and impartial. Once you have developed a good system, have confidence in it. Be sure to let students know exactly how the system works and what is expected of them. Your program and the learning process will improve with a good, well-planned grading system. Remember to be fair, impartial, and well-organized when evaluating student performance.





SOCIETAL CONSIDERATION





-19-

VOCATIONAL CONSIDERATION

VA-A-(T2)

32 **INSTITUTIONAL CONSIDERATION** 33

INTERESTED

NOT INTERESTED

STUDENT CONSIDERATION

AIMS

GOALS

OBJECTIVES

LESSONS

UNITS

COURSES

WHAT DO STUDENTS NEED TO LEARN?

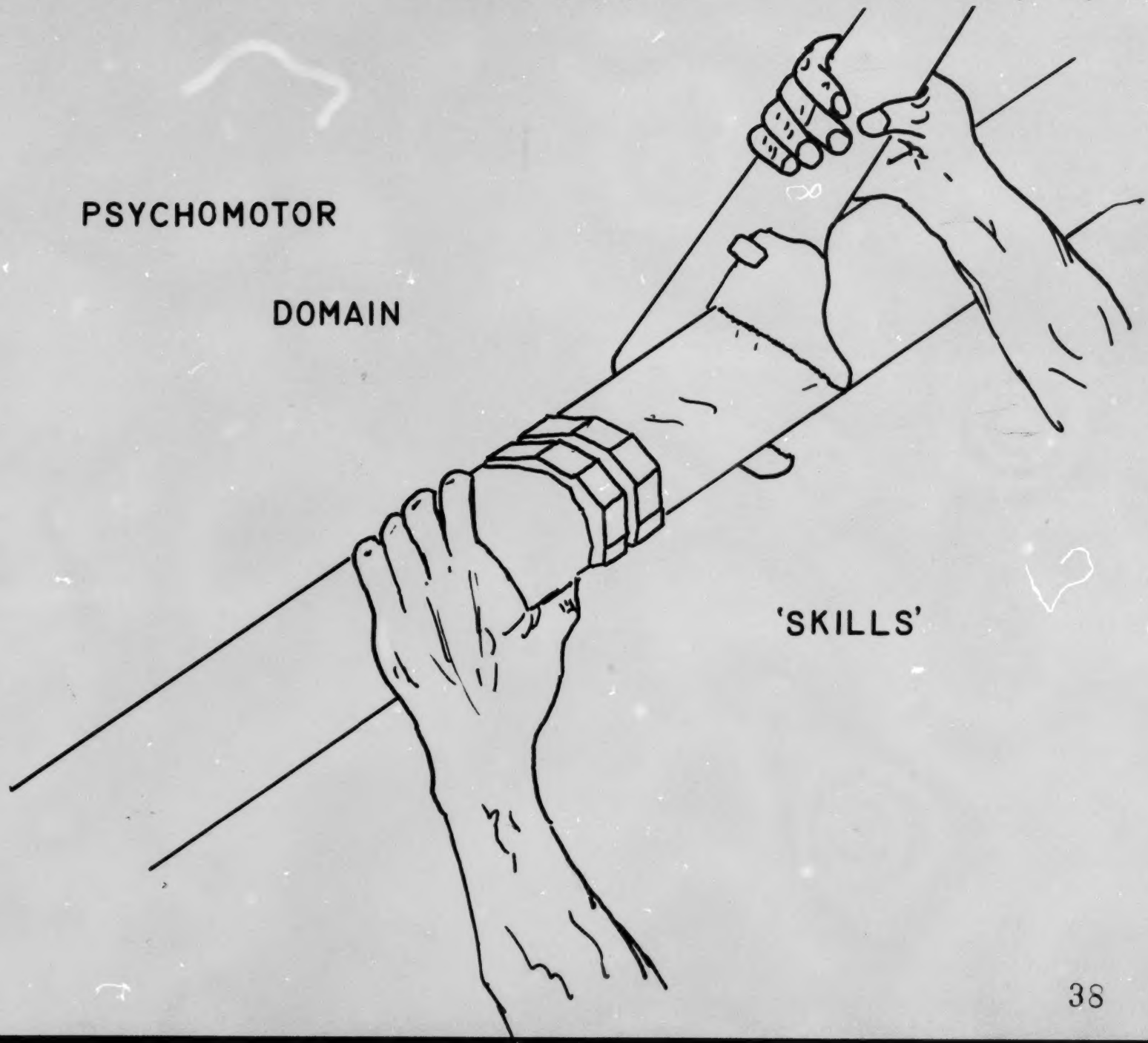
HOW WILL THEY LEARN IT?

WHAT MATERIALS , EQUIPMENT, INSTRUCTION SHEETS. ETC., ARE NEEDED?

HOW WILL I KNOW WHEN THE STUDENT REACHES THAT END POINT (OR GOAL)?

PSYCHOMOTOR

DOMAIN



'SKILLS'

-23-

VA - A - T6

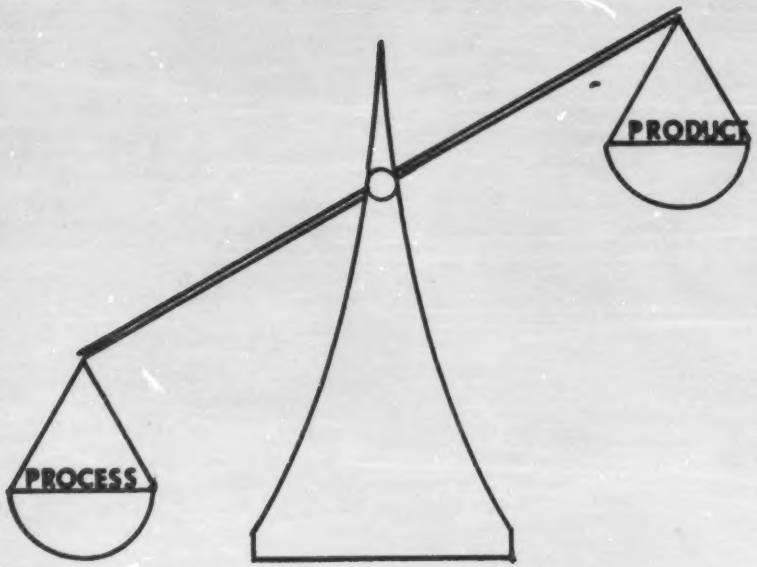
PROPERLY WRITTEN PERFORMANCE OBJECTIVES

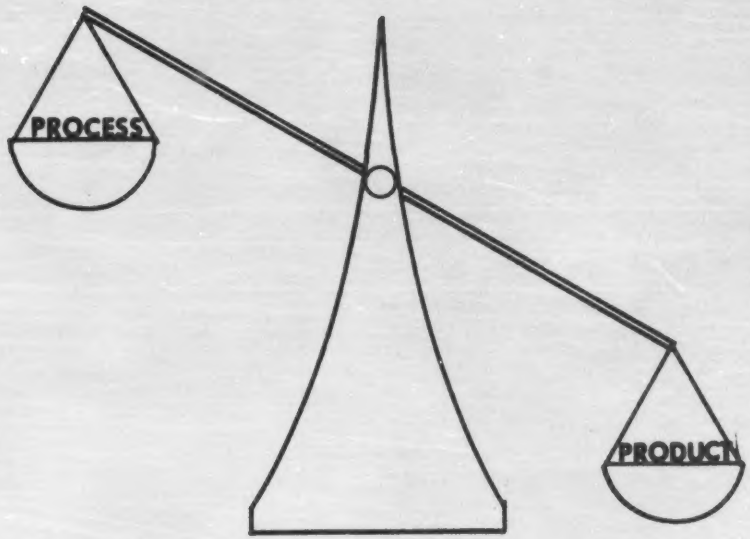
GIVEN NECESSARY INSTRUMENTS AND EQUIPMENT, THE STUDENT (WILL BE ABLE TO BISECT AN ANGLE) PROPERLY TO WITHIN .5°.

GIVEN A FRAMING SQUARE, NECESSARY EQUIPMENT, AND MATERIALS, THE STUDENT (WILL BE ABLE TO LAYOUT AND CUT A RAFTER) TO WITHIN 1/16 INCH OF REQUIRED SPECIFICATIONS IN 15 MINUTES.

AFTER COMPLETING THE UNIT ON SAFETY, THE STUDENT (WILL BE ABLE TO ANSWER ALL QUESTIONS) WITH 100% CORRECT RESPONSES WITHOUT ANY AIDS OR REFERENCES.

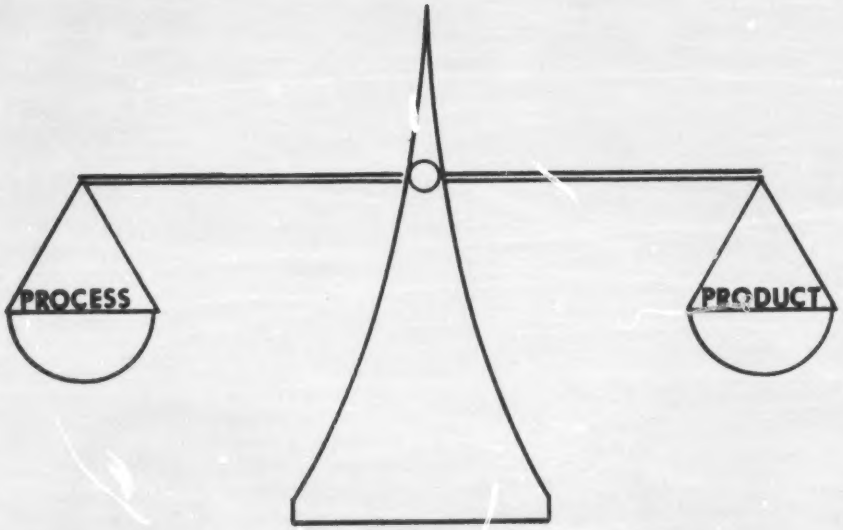
KEY: CONDITIONS - UNDERLINED ONCE, _____
PERFORMANCE - IN PARENTHESIS, ( )
CRITERION - UNDERLINED TWICE, _____





VS

PROCESS



PRODUCT

40

41

VA-A-T8

PROCESS AND PRODUCT EVALUATION CONSIDERATION

PROCESS EVALUATION IS MOST APPROPRIATE WHEN:

1. THE USAGE OF TOOLS AND EQUIPMENT IS IMPORTANT
2. HEALTH OR SAFETY HAZARDS ARE INVOLVED
3. TIME IS A PRIMARY CONSIDERATION
4. INTERIOR OPERATIONS OR PARTS CANNOT BE SEEN FROM FINAL PRODUCT

PRODUCT EVALUATION IS MOST APPROPRIATE WHEN:

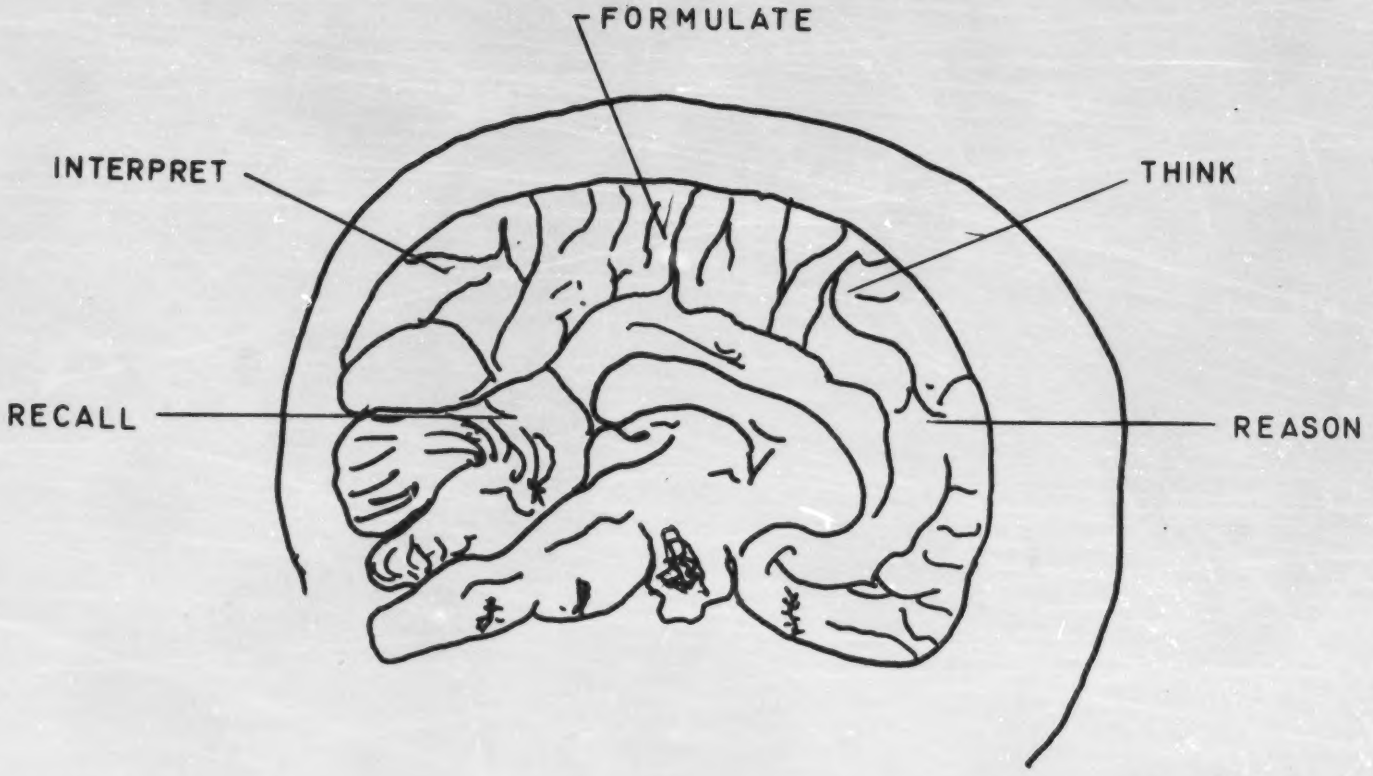
1. THE RESULT IS MORE CRITICAL THAN THE PROCEDURE
2. SEVERAL POSSIBLE PROCESSES COULD BE USED TO OBTAIN THE FINAL PRODUCT
3. THE PROCESS IS DIFFICULT TO OBSERVE AND MEASURE

FEEDBACK

IT'S THERE --- USE IT

AND

IMPROVE YOUR PROGRAM



44 COGNITIVE DOMAIN 'KNOWLEDGE' 45

VA-A-111

NEGATIVE

GOOFS OFF

MESSY

POSITIVE

KEEPS BUSY

ORDERLY

'ATTITUDES'

AFFECTIVE DOMAIN

CONCEPTS FOR CONSIDERATION FOR MEASURING STUDENTS IN ANY DOMAIN

1. Is the Instrument:

   A. Valid - Does it measure what it is supposed to?

   B. Reliable - Is it consistent/Is it stable?

2. Time of Measurement:

   A. When will we measure?

   B. Will we pre-test?

   C. Will we test during instruction?

   D. Will we post-test?

3. Type of Instrument:

   A. What type of instrument will be used in measuring students?

      - performance tests (task sheets, etc.)

      - cognitive tests (a test to meet criteria set in our objectives such as multiple choice, true-false, essay, problem solving, etc.)

      - attitudinal (interviews, monitoring, etc.)

   B. What type of checklist or rating scale instrument will be used to accurately measure the performance?

4. Scale:

   A. What type of scale will we use?

      - standard, 10 point, pass-fail, etc.

      - nominal, ordinal, interval, or ratio

5. Point of Reference:

   A. What reference will be used (norm or criterion)?

PERFORMANCE RATING SCALE EXAMPLE

PROJECT OR PERFORMANCE: _____

SCALE: 10 - Excellent, meets all standards and expectations
5 - Fair, meets about half the standards and expectations
1 - Unacceptable, meets very few or none of the standards or expectations

STUDENTS	RATING	COMMENTS

PERFORMANCE CHECKLIST EXAMPLE

UNIT:

STUDENT:

DATE:

TASK / PERFORMANCE	SATISFACTORY	UNSATISFACT.	NOT APPLICAB.	NOT OBSERVED

STUDENT/INSTRUCTOR EVALUATION SHEET EXAMPLE

PROJECT OR PERFORMANCE:

STUDENT:

DATE:

SCALE: 5 - Excellent, meets all expected standards
4 - Very good, meets most expected standards
3 - Good, meets many standards
2 - Fair, meets some standards
1 - Poor, (unacceptable) meets few or none of the expected standards

STEP/OBJECTIVE	STUDENT'S RATING	INSTRUCTOR'S RATING	COMMENTS

TASK SHEET EXAMPLE

BRICKLAYING

TASK: Construct a 16" x 20" Hollow Brick Pier

OBJECTIVE: Given the proper tools and materials, the student will lay out, lay, square, and plumb, a 16" x 20" hollow brick pier 20 courses high.

PROCEDURE:

1. Lay out the 1st course dry and square. Bed up the corner brick only, using a gauge stick for the proper height of each course. Level and fill out course, straight-edge and repeat the squaring.
2. Bed up the corner brick only, plumb and level from one corner brick to the other. Fill in remainder of the course. Never build a lead on any corner.
3. Repeat the operations, carefully plumbing each course as laid.
4. Use the short level for plumbing the first 6 courses. Thereafter use the plumb rule. Always plumb with the 1st course in contact with the rule.
5. Keep the surplus mortar from dropping into the hollow interior of the pier, as it will keep the 1st course moist, making it difficult to keep its position.
6. Keep floor clean and free from mortar, especially aroung the pier and mortar tub.
7. Finish the job by gauging, squaring, plumbing, and tooling the pier.

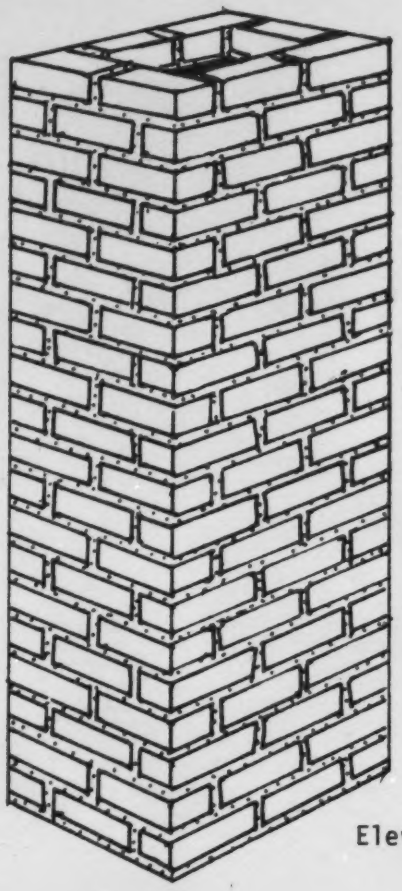
EVALUATION CRITERIA:

1. Is pier 16" x 20"?
2. Is pier 20 courses high?
3. Are corners square (90° + or - 2°)?
4. Is pier plumb?

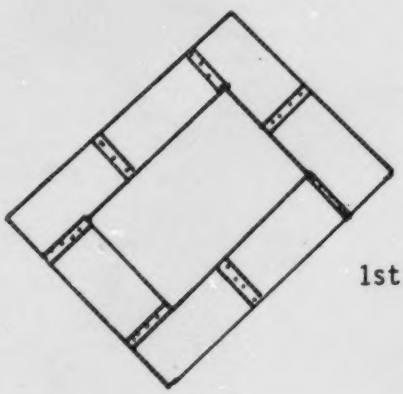
BRICKLAYING VOCATIONAL TRAINING

Project #10

A 16" x 20" HOLLOW BRICK PIER



Elevation



1st course plan

FACTORS IN TEST DESIGN

A test is only as good as its results. It should accomplish this purpose effectively and economically in a particular situation. A good test is one which is objective, valid, reliable, comprehensive, and provides for economy of time in giving and scoring. Analyze these qualities carefully.

Objective - When a test can be used by two or more examiners of equal competence and given identical or closely similar scores, it is said to have objectivity. It is a quality dependent upon purely impersonal factual evidence rather than upon judgment, personal opinion or bias. Objectivity, therefore, applies to the giving and scoring of a test rather than to the person taking the test.

Valid - When a test measures what it is intended to measure, it is said to have validity. This requires careful selection of test items to avoid irrelevant and non-essential questions which are not true measures of knowledge or ability. Every term in the test should be representative of the main purpose of the unit of study being tested.

Reliable - A test is said to have reliability when it gives consistent results whether given at different intervals to the same group or given to different groups who have received the same instruction. Reliability, therefore, refers to the accuracy with which a test measures the things it is supposed to measure.

Comprehensive - A test should give adequate coverage of the subject or that part of the subject to be tested. The questions should cover all the points emphasized in the lesson. Written tests, such as the old essay type, have only a few questions and are obviously not comprehensive.

Convenient - A test should be easy to use and should provide for economy of time in administering and scoring. Its construction should be such that it is possible to test a large number of items in a class period, and the instructor is able to score a larger number of tests with true objectivity.

REGULAR TRUE-FALSE TEST EXAMPLE

LINES AND PLANES

NAME:_____ DATE:_____

DIRECTIONS: After reading each statement carefully, circle T if the statement is true or circle F if the statement is false in the corresponding left hand column.

T F 1. A line is shown in true length when the line of sight is parallel to the line.

T F 2. Lines that lie in or parallel to a principal plane of projection are called principal lines.

T F 3. Horizontal lines are also called level lines.

T F 4. An incline line is one that is not parallel to any of the principal planes of projection.

T F 5. The bearing of a line can only be plotted in the top view.

T F 6. The grade of a line is expressed as a percentage where as the slope is expressed in degrees.

T F 7. The true slope of a line is always observed in the front view.

T F 8. An infinite number of planes can be passed through a single line.

T F 9. Two lines in a plane must either intersect or be parallel.

T F 10. Rise is always measured horizontally and the sun is always measured vertically (perpendicular to horizontal plane).

MODIFIED TRUE-FALSE TEST EXAMPLE

INTERIOR FINISHING

NAME:_____ DATE:_____

DIRECTIONS: Read each statement carefully and answer properly by circling T if the statement is true or F if the statement is false. If the statement is false, underline the word that makes it false and write the correct response in the blank.

EXAMPLE: T F low a. Framing lumber must have a high moisture content to prevent nail pops.

T F _____ 1. A common "on the job" term for gypsum is sheetrock.

T F _____ 2. The R in R-value stands for regulation to heat flow.

T F _____ 3. Another name for the interior window sill is chairail.

T F _____ 4. We should always cut from the back side when cutting with a circular saw.

T F _____ 5. An interior door unit comes complete with everything except hinges to put it into operation.

T F _____ 6. When cutting crown mold for the ceiling, we must invert the piece to cut.

MATCHING TEST EXAMPLE

SURVEYING

NAME:_____ DATE:_____

DIRECTIONS: Match an item on the right best suited to each statement on the left by placing the appropriate letter in the space provided.

____	1. Sight taken with the level to a point of known elevation.	a. chaining
____	2. Used in reconnaissance surveys to measure distance.	b. level
____	3. Most common method of determining distance.	c. vertical
____	4. An imaginary line of constant elevation.	d. horizontal
____	5. The universal instrument in surveying.	e. foresight
____	6. Line in the direction of gravity.	f. geodetic
____	7. Rate of ascent or descent.	g. plumb bob
____	8. A line tangent to a level surface.	h. contour
____	9. Surveying in which the shape of the earth is neglected.	i. backsight
____	10. Used to locate a point over unlevel ground.	j. range pole
		k. plane
		l. pacing
		m. transit
		n. grade
		o. level rod

MULTIPLE CHOICE TEST EXAMPLE

DRAFTING (Lines and Lettering)

NAME: _____ DATE: _____

DIRECTIONS: Each of the statements below has one correct answer that will complete the statement. Read each statement carefully and select the correct answer by placing the letter in the space provided.

____ 1. The letters ANSI stand for

a. American National Society for Indians
b. Atlantic Nations Society Institute
c. Architects National Standards Involvement
d. American National Standards Institute
e. None of the above

____ 2. The largest contributing factor to dirty drawings is

a. Dirt
b. Graphite
c. Ashes
d. Grease
e. None of the above

____ 3. Lines which are necessary to regulate the height of letters are called

a. Object lines
b. Section lines
c. Guide lines
d. Phantom lines
e. None of the above

____ 4. The plainest and most legible style of lettering is

a. Gothic
b. Roman
c. Italic
d. Old English
e. None of the above

____ 5. Stability of letters refers to

a. Lower portion being smaller than upper portion
b. Upper portion being smaller than lower portion
c. Upper portion and lower portion same size
d. Middle portion being larger
e. None of the above

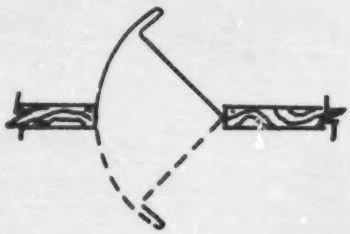
PICTORIAL RECALL TEST EXAMPLE

INTERIOR DOOR UNITS

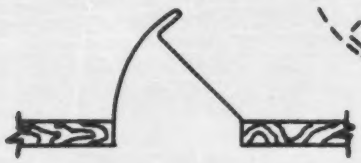
NAME: _____ DATE: _____

DIRECTIONS: Answer each of the following by identifying the type of door unit and place the proper name of the unit in the blank space provided.

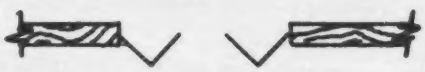
EXAMPLE: _____ A.



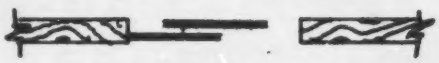
_____ 1.



_____ 2.



_____ 3.



_____ 4.

_____ 5.

COMPLETION TEST EXAMPLE

DESCRIPTIVE GEOMETRY

NAME:_____ DATE:_____

DIRECTIONS: After reading each statement carefully, decide on an answer which will fill in the blank and complete the statement correctly. Write the answer in the blank space provided at the left of the statements.

_____ 1. One of the first people to use descriptive geometry to solve problems was a Frenchman by the name of _____.

_____ 2. A(n) _____ has location only and no dimensions.

_____ 3. Two lines or planes that will never intersect are _____.

_____ 4. A(n) _____ is an imaginary straight line from the eye to a point of the object.

_____ 5. Two lines or planes that intersect at a right angle with each other are said to be _____.

_____ 6. A(n) _____ line is a level line.

_____ 7. A(n) _____ line is perpendicular to the horizontal plane.

_____ 8. A(n) _____ line is inclined to all principle directions of sight.

_____ 9. A(n) _____ plane is perpendicular to the frontal plane.

_____ 10. A view projected on any plane other than one of the three principle planes of projection is a(n) _____ view.

ESSAY TEST EXAMPLE

TECHNICAL PHYSICS
(Basic Machines and Friction)

NAME: _____ DATE: _____

DIRECTIONS: Answer each question below as thoroughly yet as briefly as you can. Use complete sentences and use correct terminology.

1. Explain what a lever is and why it can provide mechanical advantage.

2. Identify and explain the classes of levers (examples of each class should be given).

3. Explain why friction can be good and bad in everyday life.

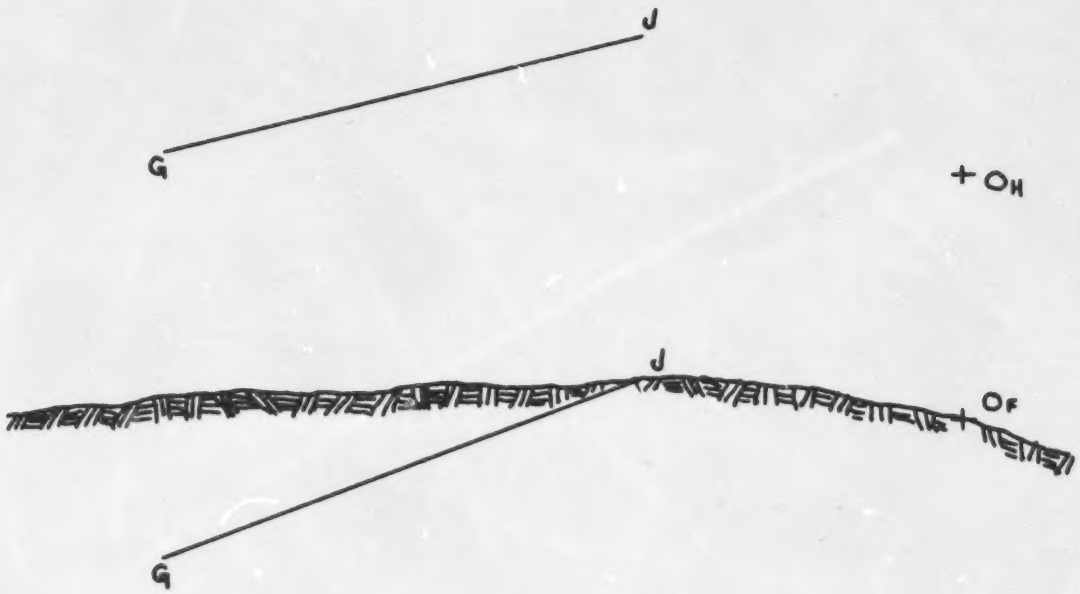
4. Explain how the AMA of any machine is found.

5. Explain the effect friction has on machines as far as efficiency is concerned.

PROBLEM SOLVING TEST EXAMPLE

NAME: _____ DATE: _____

DIRECTIONS: Find the Bearing, Length and Grade of a shaft to be driven from point O to join tunnel GJ at a point 30 meters from J - scale 1 / 1000 (show all work)



AFFECTIVE DOMAIN RATING SCALE EXAMPLE

STUDENT:_____ DATE:_____

SCALE: 7 - Excellent
4 - Adequate
1 - Poor

AREA/ATTITUDE							
1. Participates in class discussions	7	6	5	4	3	2	1
2. Completes class assignments on time	7	6	5	4	3	2	1
3. Respects rights of others	7	6	5	4	3	2	1
4. Listens attentively	7	6	5	4	3	2	1
5. Values time	7	6	5	4	3	2	1
6. Takes pride in work	7	6	5	4	3	2	1
7. Takes care of equipment	7	6	5	4	3	2	1
8. Neat and orderly	7	6	5	4	3	2	1
9. Attendance - on time	7	6	5	4	3	2	1
10. Works well with others	7	6	5	4	3	2	1
11. Has a positive attitude about his/her service or training area	7	6	5	4	3	2	1

AFFECTIVE CHECKLIST EXAMPLE

CLASS/GROUP: _____

DATE OF EVALUATION: _____

SCALE: - Very Good
- Good
- Poor

STUDENT	WORKS WITH OTHERS	TURNS IN WORK ON TIME	ORGANIZES WORK WELL	VALUES EQUIPMENT	ACCEPTS RESPONSIBILITY	(OTHER)	COMMENTS

GRADING SYSTEMS

I. Standard System:

grade	explanation	number equivalent (standard scale)	number equivalent (10 point scale)
A	Excellent work	95 - 100	90 - 100
B	Very Good work	85 - 94	80 - 89
C	Average work	75 - 84	70 - 79
D	Poor work	70 - 74	60 - 69
F	Failure	Below 70	Below 60

II. Pass - Fail System

This system is especially useful on special performances such as safety tests or other tests or performances where 100% accuracy is needed. This system demands that the student is either all right or all wrong. Some courses may even be set on this system.

III. Satisfactory - Unsatisfactory System

This system is effective when individual items are under consideration (Is it acceptable or not).

IV. Written Comments:

These can be very helpful and useful to instructors, administration, students, and to prospective employers. The comments can be best used as an "addition" to another type of grading system. They can even be attached to permanent records.

V. Reports or Checklists: (can also be attached to permanent records)

EXAMPLE:

NAME:_____ INSTRUCTOR:_____

SKILL	GRADING PERIOD												COMMENTS
	above avg.	average	below avg.	above avg.	average	below avg.	above avg.	average	below avg.	above avg.	average	below avg.	

INSTRUCTOR'S PLAN

INFORMATIONAL LESSON

Unit VA
Lesson VA-B

UNIT TITLE: Evaluating and Recording Student Achievement in Vocational Education

LESSON SUBJECT: Recording Student Achievement

OBJECTIVES: The student will be able to:

A. Identify means of recording student achievement

B. Distinguish between grades and student achievement

C. Identify the need of listing student competencies on records and certificates.

TEACHING AIDS:

A. Teaching Aid:

VA-B-(A1) Recording Student Achievement

B. Instructional sheets:

VA-B-(I1) Individual Achievement Charts
VA-B-(I2) Progress Chart

C. Evaluation:

VA-A-(E1) Post-Test

MATERIAL/EQUIPMENT: Student materials

REFERENCES:

Erickson, Richard C., and Wentling, Tim L., Measuring Student Growth, Allyn and Bacon, Boston, Mass, 1976.

The Center of Vocational Education, The Ohio State University, Columbus, Ohio, 1977.

Module D-5, "Determine Student Grades"

Module D-6, "Evaluate Your Instructional Effectiveness"

I. INTRODUCTION (Preparation of the Learner)

After a suitable grading system has been developed and instructors start to evaluate students or measure students through

tests, etc., a dependable recording system must be available. A recording system should allow space for grades in each domain as well as remarks or comments on each grade. Accurate measurements and evaluation are expected and many times required by school administration. This lesson attempts to discuss ways of recording student achievement.

II. LEARNING ACTIVITIES (Presentation of Information)

Instructional Topics Teaching Points	Things For Students To Do Things For Instructors To Do And Say
A. Grade Books	1. Used very widely
	2. Required many times by administration
	3. Are they valid?
B. Individual Achievement Sheets or File Cards	1. Can be designed to meet your need
Instructional Sheet VA-B-(I1)	2. Are very efficient and useful
	3. Protects privacy rights
	4. Take extra time in recording grades
C. Progress Charts	1. Limited by privacy acts
Instructional Sheet VA-B-(I2)	2. Kept in private, still very useful
Class Discussion	3. Discuss other ways of recording achievements
D. Competencies or Levels of Mastery	1. Useful possibilities
	2. Lets industry know what student competencies are
Class Discussion	3. Discuss other ways of listing or using competencies

III. APPLICATION (Drill, illustrations, questions, participation in discussion, assignments, investigations, note-taking, etc.)

Steps II and III are combined.

Students will be provided an opportunity to examine and comment on handouts.

Class discussion at the end of Step C on recording systems.

Class discussion at the end of Sept D on possibilities of listing competencies on certificates, etc.

IV. EVALUATION (Verification of student's comprehension of material presented)

A. The student's participation in class discussions will be evaluated by instructor.

B. A post-test will be given at the end of instructional unit.

V. SUMMARY (Reemphasize the important points. This summary may be given at any place in the lesson the teacher feels will be profitable to the student)

Point 1 - An accurate recording system is a must for all instructors.

Point 2 - It should be designed to show measurements and comments, etc. in all three learning domains.

Point 3 - Levels of mastery may need to be shown on certificates of completion.

TEACHING AID

SUBJECT: Recording Student Achievement

An extension of determining student grades is the recording of student grades and achievement. This is a vital part of the educational system. Most institutions require instructors to keep records (usually grade books) of student grades and achievement. These records become a part of the student's permanent personal record which follows him/her throughout life. Therefore, it is vital that complete and accurate records be kept on each student.

Grade books are probably the most widely used method of recording student grades. However, much of the time grade books do not tell the "whole story" about the student because too often we tend to record only grades assigned on the basis of cognitive tests or daily assignments. A grade book provides an accurate way of recording student grades only when the grade assignment is made on the basis of valid and reliable instruments which measure student performance and achievement in all three domains of learning.

Two additional methods which are very effective for recording student achievement are:

A. The individual achievement sheet. The individual assignment is a sheet of paper or card(s) on which lines and columns have been drawn for the purpose of recording student achievement on performance tests, cognitive tests, daily assignments, laboratory experiments, affective evaluations, anecdotal comments, etc. It can be designed to fit any vocational program and can be easily interpreted by students, parents, and administrators. It also has the advantage of permitting the instructor to show an individual student his or her grades without letting the student see other students' grades, as would be the case with the grade book. The individual assignment sheet does have the disadvantage of being time-consuming to prepare and maintain. However, the time spent may be well worth the benefits attained.

B. Progress chart. The progress chart, like the assignment sheet, provides lines and columns for indicating course performance requirements and activities and recording whether or not such requirements or activities have been completed by the student. Progress charts are easier to maintain than individual assignment sheets in that a record of all students' progress is kept in one chart. When using posted progress charts extreme care must be taken not to violate the "privacy act" by posting individual grades.

When assigning and recording final grades on permanent student records, some vocational-technical educators believe that individual student competencies or mastery levels attained should also be recorded. Advocates for recording competencies argue that recording competencies is essential to letting prospective employers know what the student is able to do. For example, a student in drafting may receive a final grade of A (for excellent) but be weak in "lettering", or a student of automobile mechanics may receive a final grade of B and yet be exceptionally competent in tuning an engine. If competency records are kept, every competency required for entry into the occupation should be listed and the level each student achieved recorded.

There are other methods of recording student achievements that are equally as useful and as efficient as those described. Also, one method may be more appropriate for one service area, course of instruction, or instructor than another. The key to success is not which system is used, but that you have a system that works and use it.

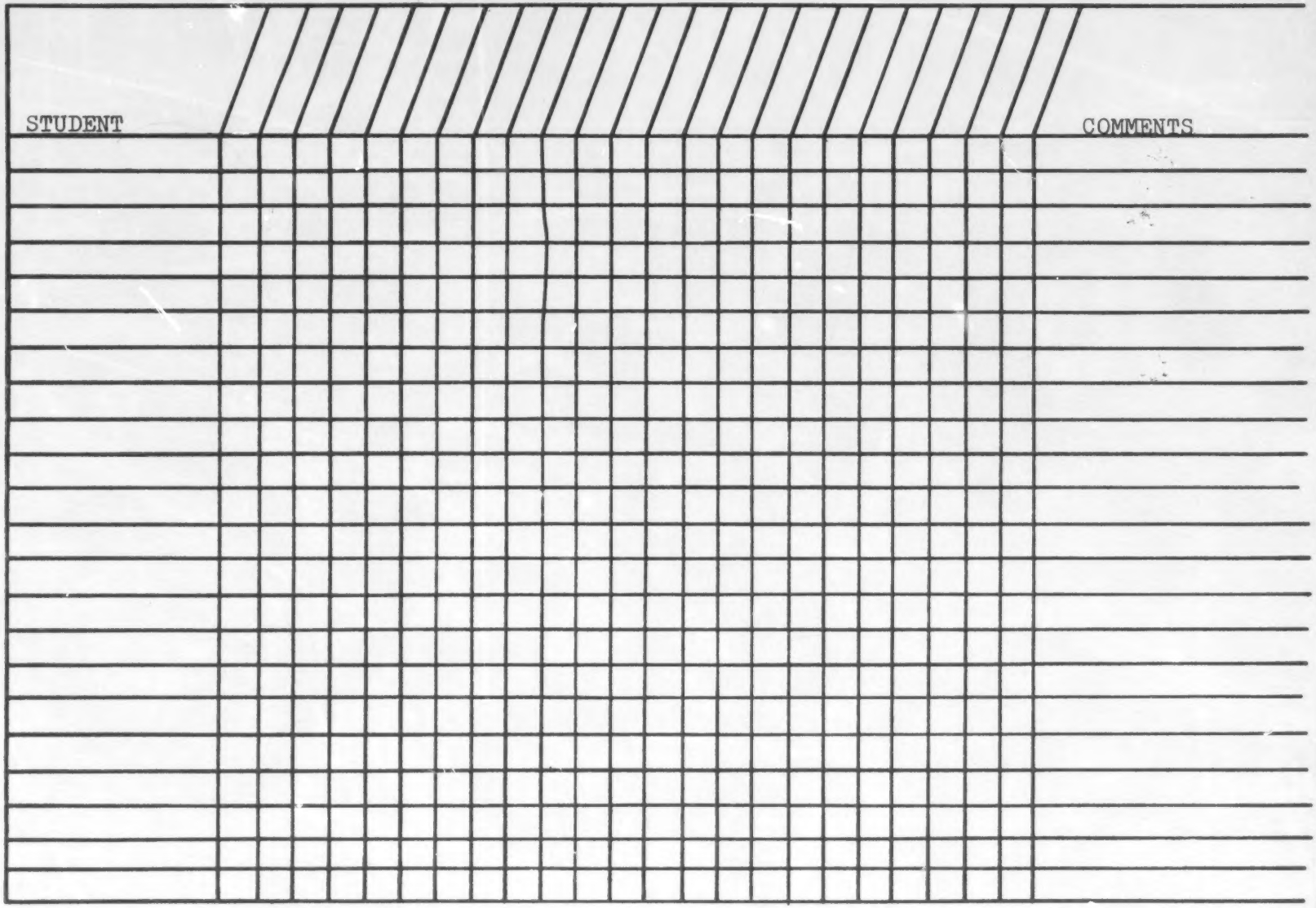
INDIVIDUAL RECORDING SHEET EXAMPLE

STUDENT:_____ EVALUATION PERIOD:_____

SCALES:
1. Standard
   95-100 (A)
   85-94 (B)
   75-84 (C)
   70-74 (D)
2. Pass-Fail
   Pass (P)
   (work acceptable)
   Fail (F)
   (work unaccept.)
3. Satisfactory-Unsatisfactory
   S (very good, acceptable)
   U (very poor, unaccept.)

EVALUATION/INSTRUMENT	DATE DUE	DATE RECEIVED	GRADE	COMMENTS

COURSE: TRADE: PERIOD:



Task/performance started

Task/performance completed

POST-TEST

EVALUATING AND RECORDING STUDENT ACHIEVEMENT

NAME:_____ DATE:_____

DIRECTIONS: Answer each question below as thoroughly yet as briefly as you can.

1. List the learning domains vital to the evaluation process.

2. Briefly explain some measurement considerations you feel important for evaluation purposes.

3. Tell when you feel it would be important to evaluate process and when to evaluate product in your service area.

4. List some ideas or factors important to test construction.

5. Briefly explain why (or why not) you feel it is important to evaluate student attitudes and values.